

MEXICO

ABSTRACT

This project to develop an integrated air quality and greenhouse gas mitigation plan for the Mexico City Region will begin in early 2001. It will build on a past studies on the health effects of local air pollutants and on the cost-effectiveness of energy sector measures for reducing greenhouse gas emissions. One of the main goals of this project is to develop harmonized air pollution and climate change mitigation measures that can be included in the new ten-year Mexico City Metropolitan Area air quality program.

INTRODUCTION

In spite of some improvements achieved during the last few years, air pollution in the Mexico City Metropolitan Area (MCMA) is still a major problem, due to its effects on human health and on the wellbeing of a growing population, which nowadays exceeds 18 million inhabitants. In addition the MCMA is also a major source of greenhouse gas emissions. Mexican society recognizes the magnitude of the air pollution problem, and gives a high priority to its solution. The Metropolitan Environmental Commission (CAM) is currently developing a new 10-year program to further improve the air quality in the MCMA. This program will take into account the fact that resources are limited, and thus will look for actions and instruments that are technically and economically feasible and politically and socially acceptable. Integration of these air pollution strategies with development of measures for reducing greenhouse gas emissions will help support the need to find cost-effective measures that have multiple benefits.

Some possible control measures and actions have been identified already by past and ongoing studies, workshops, and working groups and this work is providing a foundation for the new air quality program. The technical feasibility of these measures needs to be assessed, as well as their cost-effectiveness, which should include the potential of policies and actions to impact positively both the local and global environments. Measures that could contribute to both local air pollution and climate change goals, should be given priority when assessed and compared to others. The local air quality program should look at the greenhouse gases (GHG) mitigation potential of its measures and strategies, and integrate global climate change concerns into decision making.

Goals and Rationale

The fundamental objectives of this study are:

- ❖ To identify and characterize pollution prevention and control strategies and measures for the Mexico City Air Quality Program that will have both local benefits and will support efforts to reduce greenhouse emissions
- ❖ To assess the magnitude of the combined air pollution and climate change benefits of integrated measures, primarily on human health
- ❖ To offer recommendations for the design of integrated local air pollution and climate change strategies

METHODOLOGY

To attain the above objectives, the following tasks will be implemented:

Phase I

1. Analysis of the relationship between urban, regional, and global air pollution problems that are relevant to MCMA.
2. Identification of the air pollution control measures and strategies being proposed (by the working groups that are producing inputs) for the new MCMA air quality program, that may have local, regional, and global impacts.
3. Assessment of the co-benefits of integrated air pollution and climate change strategies, including analysis of the public health benefits of such integrated strategies and economic valuation of these public health benefits. The “Willingness to Pay” approach may be used for this economic valuation of the health impacts.

Phase II

1. Design of new measures that could be included in the ten-year MCMA air quality program, which may serve two purposes: (1) improve local air quality, and (2) mitigate GHG emissions. Special attention should be given to energy consumption, and particularly to fuel improvements (de-sulfurization of gasoline and other fuels), fuel consumption, and energy efficiency. Policy options, strategies, measures and even studies from other countries (especially those in Latin America, mainly Brazil and Chile), should be considered for the design of new measures for the MCMA, and comparisons should be made between countries/cities when appropriate.
2. In depth assessment (costs and local/global impact) of the measures, strategies and policies proposed. Comparison of alternative scenarios of energy/fuel consumption with different policy and technology options.
3. A seminar of experts to solicit their input on the design and assessment of the policies

Expected Products

Phase I

During Phase I, a study will be completed on local air quality and climate change mitigation impacts of alternative measures to serve as an input for the preparation of the new Air Quality Program for MCMA 2001-2010. This study will identify and assess the local, regional, and global impacts of policies and measures that are being proposed for this air quality program

Phase II

During Phase II, a proposal defining specific policies and measures to be included in the new Air Quality Program for MCMA 2001-2010, that protect both the local and global environments will be developed. These proposals will be thoroughly assessed, with the help of experts brought together in a seminar.

Project Team

The institution technically responsible for supervising this work will be the National Institute of Ecology (INE), which is part of the Ministry of Environment, Natural Resources and Fisheries (SEMARNAP). INE will direct this work through its General Directorate for Environmental Management and Information, and the Directorate of Global Climate Change, which is part of the General Directorate of Environmental Regulation.

SCHEDULE

Phase One will begin in early 2001 and will require six months. One year will be needed to implement the tasks described in Phase II. This schedule is depicted in the figure below.

PHASE ONE

COMPONENT	MONTH					
	1	2	3	4	5	6
Task 1						
Task 2						
Task 3						

PHASE TWO

COMPONENT	MONTH											
	1	2	3	4	5	6	7	8	9	10	11	12
Task 1												
Task 2												
Task 3												